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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/524,088	02/09/2005	Tsuyoshi Ito	05026/LH	2397

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EXAMINER

BUI PHO, PASCAL M

ART UNIT	PAPER NUMBER
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2878

DATE MAILED: 04/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/524,088

Applicant(s)

ITO, TSUYOSHI

Examiner

Pascal M. Bui-Pho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>09 February 2005</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement filed 09 February 2005 has been entered. Since no English translation was provided at the time of filing, documents were considered to the best of Examiner's ability.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 7, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Kojima (US 5,086,228).

With regards to claim 1, Kojima discloses in Figs. 1 and 3 an image input apparatus (30) which includes a detection section (41) to detect radiographic image from a recording

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member (31) having radiographic image information recorded thereon, and reads the detected radiographic image, the image input apparatus comprising: an inherent creation section to create a plurality of correction for correction of unevenness on the image or radiography sensitivity (one of ordinary skill in the art would recognize that a creation section must be present in order to create correction values), in which the plurality of correction values correspond to a plurality of detection regions (defined by scanning in a main direction and a sub-scanning direction with a rotating polygon mirror); a storage section (47) to store the created plurality of correction values; and a selecting unit to select an optimal correction value (each region having its corresponding optimal correction value) upon image reading, wherein the optimal correction value is used for the image reading (Columns 12-14). Herein, Examiner assesses that a correction value is created for each detection region, the correction value being optimal.

With regards to claim 7, Kojima further discloses an input apparatus wherein a correction value of a region to be used is created beforehand and stored in the storage section (47), and correction is performed by using the correction value, on images having a plurality of regions (Columns 12-14).

With regards to claim 8, Kojima further discloses an image input apparatus wherein the storage section (47) records image information, stores a plurality of version data (first and second correction values) containing information about the recording member from which the image recorded thereon is detected by the detection section, and stores each of the correction values corresponding to the version data, and the selecting section selects the optimal correction value based on relevant version data (Column 6, line 47 – Column 8, line 17; Columns 12-14).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3-6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kojima (US 5,086,228).

With regards to claims 3, 4, and 6, Kojima discloses in Figs. 1 and 3 an image input apparatus where a relevant correction value (optimal correction value) is used for correction of an image of a detection region. Kojima however remains silent with regards to said detection region not being larger than a predetermined region. At the time of the invention, selecting specific a detection region to correct an image region would have been obvious to one of ordinary skill in the art. It would therefore have been obvious to modify Kojima accordingly in order to provide optimal and more precise detection.

With regards to claim 5, Kojima discloses an image input apparatus comprising of a storage section (47), but lacks an inclusion of another storage section to separately store an unconditionally-used correction value used when the optimal correction value does not exist. At the time of the invention, it would have been obvious to one of ordinary skill in the art to add a secondary storage section to store additional and/or unused values and modify Kojima accordingly in order to provide higher system efficiency.

With regards to claim 12, Kojima discloses an image input apparatus, but lacks a clear inclusion of a warning function to indicate that the unconditionally-used correction value is used.

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At the time of the invention, however, it would have been obvious to one of ordinary skill in the art to include such warning function and modify Kojima accordingly in order to provide better visual results from the apparatus.

8. Claims 2 and 13-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kojima (US 5,086,228) in view of Suzuki et al. (US 5,604,781).

With regards to claim 2, Kojima discloses in Figs. 1 and 3 an image input wherein the plurality of correction values is stored in the storage section (47). Kojima however remains silent with regards to said correction values being created for each of a plurality of correction coefficients. In an analogous image correction art, Suzuki et al. disclose in Figs. 4 and 5 an image input apparatus wherein a plurality of correction values (Figs. 5a-c) are created for each of a plurality of correction coefficients (Fig. 5e) and stored in a storage section (37). At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify Kojima in view of Suzuki et al. in order to provide greater image quality.

With regards to claim 15, Kojima discloses an image input apparatus having a function to perform selection according to a condition which is determined beforehand to select the optimal correction value (Column 6, lines 4-47).

With regards to claim 16, Kojima discloses an image input apparatus wherein the apparatus includes, as the plurality of correction values, all of version data, a detection region (31), an inherent image sampling pitch (one of ordinary skill would recognize that all image sampling have a pitch), a time difference between reading speeds of each of main-scanning (X)/sub-scanning (Y), and data on an X-ray tube (41).

With regards to claim 17, Kojima discloses an image input apparatus comprising a storage section (47), but lacks a clear specification of using the version data as a search key during correction value selection decision. Utilizing a search key to facilitate searching of the optimal correction value would have been obvious to one of ordinary skill in the art. At the time of the invention, it would have been obvious to modify Kojima accordingly in order to increase system efficiency.

With regards to claims 18 and 19, Kojima discloses an image input apparatus wherein the apparatus includes an unevenness correction value corresponding to an image area (31), stores (47) a plurality of correction values for each of X-ray tubes (41) to be used, and selects a corresponding correction value therefrom when a relevant X-ray tube is used.

With regards to claim 20, Kojima and Suzuki et al. disclose an image input apparatus where a relevant correction value (optimal correction value) is used for correction of an image of a detection region. Kojima and Suzuki et al. however remain silent with regards to said detection region not being larger than a predetermined region. At the time of the invention, selecting specific a detection region to correct an image region would have been obvious to one of ordinary skill in the art. It would therefore have been obvious to modify Kojima and Suzuki et al. accordingly in order to provide optimal and more precise detection.

9. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kojima (US 5,086,228) in view of Baba et al. (US 5,485,500).

With regards to claims 9 and 10, Kojima discloses in Figs. 1 and 3 an image input apparatus, but lacks a clear specification of when a relevant version data does not exist, a correction value selected based on adjacent version data is used for the image reading. In an

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analogous imaging art, Baba et al. disclose in Fig. 1 an image input apparatus wherein when the relevant version data does not exist, a correction value selected based on adjacent version data is used for the image reading using interpolation and/or extrapolation methods (Column 6, line 64 – Column 7, line 15). At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify Kojima in view of Baba et al. in order to output an image of higher quality.

With regards to claim 11, Kojima and Baba et al. disclose an image input apparatus, but lack an inclusion of another storage section to separately store an unconditionally-used correction value used when the correction values do not exist or a correction value corresponding to the relevant version data does not exist adjacently, wherein, when the relevant version data does not exist, the unconditionally-used correction value is used for the image reading. At the time of the invention, however, it would have been obvious to one of ordinary skill in the art to add another storage section and modify Kojima and Baba et al. accordingly in order to provide higher system efficiency.

10. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kojima (US 5,086,228) in view of Suzuki et al. (US 5,604,781), further in view of Akuzawa et al. (US 5,331,441).

With regards to claims 13 and 14, Kojima and Suzuki et al. disclose an image input apparatus, but lack a clear inclusion of an erasing section to erase obsolete correction values. In an analogous image correction art, Akuzawa et al. disclose in Fig. 1 an image reading apparatus comprising an erasing section to erase unwanted correction values (Column 3, line 23 – Column 4, line 6). At the time of the invention, it would have therefore been obvious to one of ordinary

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skill in the art to modify Kojima and Suzuki et al. in view of Akuzawa et al. in order to provide a more efficient system.

Conclusion

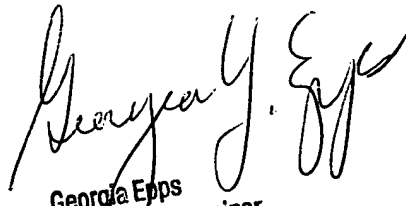
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pascal M. Bui-Pho whose telephone number is (571) 272-2714.

The examiner can normally be reached on Monday through Friday: 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on (571) 272-2328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Pascal M. Bui-Pho
Examiner, Art Unit 2878
13 April 2006


Georgia Epps
Supervisory Patent Examiner
Technology Center 2800